



HIMCO LANDFILL SUPERFUND SITE SITE HISTORY

- The Site was operated by Himco Waste Away Service Inc. between 1960 and 1976.
- The Site was closed in 1976 according to then applicable law. The final cover included two feet of calcium sulfate and two feet of soil.
- During the Remedial Investigation, a "hot spot" was identified and remediated at the southwest border of the landfill. Seventy-one 55-gallon drums were removed on May 22, 1992.
- The September 1993 Record of Decision identified a remedy consisting of a composite cap, active collection of landfill gas, ground water monitoring, and institutional controls. That remedy was estimated to cost \$12 million.
- Currently, the Site is highly vegetated and there are no Site uses.
- With the exception of one drinking water well southwest of the Site (the Stoner well across Highway 10, which was sampled in May 1992 and showed no contamination), "there is no current use of the aquifer in the vicinity of the Site."

HIMCO LANDFILL SUPERFUND SITE OVERVIEW OF BASELINE RISK ASSESSMENT

- "There appears to be no cause for concern for any current uses of the site. All carcinogenic risk estimates were below 1E-04 (one excess cancer per 10,000) and no hazard indices exceeded 1. These estimates place risks within an acceptable range as established by the NCP."
- "If homes or commercial establishments south of the landfill were to use groundwater in this (off-site) area in the future, the estimated site-related risks associated with ground water are within the acceptable risk ranges. It appears that although the landfill leachate is contaminated..., this contamination has not impacted (off-site) ground water south of the landfill to a level of concern."
- The baseline risk assessment (BRA), therefore, concluded that the only threats at the Site are posed by consumption of landfill leachate or on-site ground water as residential drinking water and direct contact with soil in the construction debris area, should the site be developed for future residential use.

HIMCO LANDFILL SUPERFUND SITE PRIMARY POINTS OF CONTENTION

- Since its Record of Decision was issued, USEPA has revised its policy regarding carcinogenicity assessment for polycyclic aromatic hydrocarbons (PAHs). If the current guidelines are implemented for the Himco BRA, then soil ingestion in the construction debris area also results in an estimate of excess cancer risk that is within the acceptable risk range.
- The BRA did not determine which chemical substances were site-related. According to the BRA, "Virtually all this risk (posed by hypothetical consumption of leachate or on-site ground water) is attributable to chemicals not detected, but conservatively evaluated as if they were present, or to chemicals attributable to upgradient or background sources."
- Benzene is the only substance, out of the 23 substances treated as carcinogens in the BRA, that was detected in down-gradient, on-site wells but not in background samples. The risks attributable to benzene from consumption of on-site ground water are in the acceptable range for both shallow and deep ground water zones.

HIMCO LANDFILL SUPERFUND SITE PRIMARY POINTS OF CONTENTION

- Residential development of the Site is highly unlikely.
- The National Contingency Plan does not compel making remedy decisions on the basis of unlikely future land uses (see, for example, the Record of Decision for the Revere Textile Site).
- An unacceptable risk would not have been obtained for the future residential use scenario if the assessment was based upon only detected substances that are not also in background ground water.
- The primary remedial components in the USEPA remedy for mitigating the risks posed by leachate and ground water consumption are institutional controls (deed and access restrictions).
- Ground water monitoring data should be used to assess the need, if any, to construct a composite cap on the Site.
- The Feasibility Study did not consider a remedial alternative consisting of institutional controls and ground water monitoring.

TABLE 1
SUMMARY OF BASELINE RISK ASSESSMENT AND REMEDY COMPONENTS
HIMCO LANDFILL SUPERFUND SITE, ELKHART INDIANA

Medium and Area of Potential Concern	Results of EPA's Baseline Risk Assessment	Components of Remedial Action Plan	
		USEPA ROD	Alternative to Secure Site
GROUND WATER			
Off-site, Across Highway 10	"The RI data indicated that ground water downgradient of the Site has not been impacted to a level of health and environmental concern by the site contaminants."	None Needed	None Needed, (On-site monitoring provides a sentinel)
On-site, South of the Landfill, Shallow and Deep Ground Water <i>See MCLs</i>	If homes are built on the Site in the future, consumption of ground water as drinking water could result in an excess cancer risk greater than the acceptable risk range. ¹	Institutional Controls (Access Restrictions, Deed Restrictions), Ground Water Monitoring	Institutional Controls (Access Restrictions, Deed Restrictions), Ground Water Monitoring
Landfill Leachate	If homes are built on the Site in the future, consumption of leachate as drinking water could result in an excess cancer risk greater than the acceptable risk range. ¹		

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Medium and Area of Potential Concern	Results of EPA's Baseline Risk Assessment	Components of Remedial Action Plan	
		USEPA ROD	Alternative to Secure Site
SOILS			
On Landfill	The BRA indicates that soil ingestion would not result in an excess cancer risk greater than the acceptable risk range, even for the hypothetical future resident. ²	None Needed, but Access Restrictions provided	None Needed, but Access Restrictions provided
Construction Debris Area, in Southeast Portion of the Site	If a residence were placed in this area, then the BRA indicates that soil ingestion could result in an excess cancer risk greater than the acceptable risk range. ² An acceptable risk estimate results, however, if the BRA is updated to reflect current USEPA policy regarding the carcinogenicity of PAHs.	Access Restrictions	None Needed, but Access Restrictions provided

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Medium and Area of Potential Concern	Results of EPA's Baseline Risk Assessment	Components of Remedial Action Plan	
		USEPA ROD	Alternative to Secure Site
AIR			
Downwind Residents	Inhalation of particulates and vapors does not pose an unacceptable cancer risk	Active Gas Collection and Treatment	None Needed
On and South of the Landfill	Inhalation of particulates and vapors does not pose an unacceptable cancer risk, even for a future resident ✓		
NOTES:			
1 The Baseline Risk Assessment (BRA) report indicates that "Virtually all this risk (posed by hypothetical consumption of leachate or on-site ground water) is attributable to chemicals not detected, but conservatively evaluated as if they were present, or to chemicals attributable to upgradient or background sources."			
2 The Baseline Risk Assessment (BRA) report indicates that "There appears to be no cause for concern for any current uses of the Site" involving surface soil (e.g., dirt-bike riding).			